REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of March 22, 2004 (Office Action). This response is being filed with a petition for a one month retro-active extension of time with the appropriate fee.

In paragraph 2 of the Office Action, claims 8-11, 19-24, and 31-34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,311,159 to Van Tichelen *et al.* (Van Tichelen) in view of U.S. Patent No. 6,278,770 to Makihata (Makihata). In paragraph 3, claims 8-11 and 19-24 have been alternatively rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,510,414 to Chaves (Chaves) in view of Van Tichelen and Makihata.

The Applicant previously amended claims 8, 19, 23, and 27. The Applicant has amended only claim 23 in this Amendment to correct a minor oversight in the prior amendment. No existing speech recognition system changes the WORDS based on the spacing between words. Once again, the Applicant believes another example will help clarify the distinction between the present invention as claimed and the cited references. Embodiments in accordance with the invention can take a user input DTMF string of "110" and choose to generate either "one one zero" or "one ten" or "one hundred ten" (or even other alternatives) based on the prosody between button presses. In the claims, DTMF signals are received, at least one prosodic characteristic of the DTMF signal is determined, the DTMF signals are grouped according to the determination of at least one prosodic characteristic, and the DTMF signal is converted to one of a plurality of textual representations based on the grouping (which is based on the at least one prosodic characteristic determined of the DTMF signal).

Although the Examiner seems to believe that such a teaching is inherent in some of the cited references, none of the references remotely suggest, mention, or contemplate the analyzing of the prosody of the DTMF signal nor do they suggest, mention or contemplate the conversion of the DTMF signal to one among a group of text representative based on the prosody determination. For example, Van Tichelen does not change the output of the text. Every time the "1" key is pressed in Van Tichelen, they emit the word "one". The text string "111" would be "one one one" whereas the present invention would provide either "one one one" or "one eleven"

or "one hundred eleven" or "eleven one" or possibly other combinations based on the prosody determined from the DTMF signals. The passages in columns 1 and 3 of Van Tichelen cited by the Examiner have nothing to do with determining prosody nor is there any suggestion that DTMF signals can be converted into one of a various group of text representations based on prosody.

Likewise, the passages and figures cited by the Examiner in Makihata have nothing at all to do with determining prosody or converting DTMF signals into one of a various group of text representations based on prosody. Instead, Makihata discusses recognizing a single character, and identifying what character was pushed, either * or #. Based on when this was pushed, relative to a PROMPT being played to the user, the system in Makihata can identify which selection the user pressed a key on, or advance to the next selection. The timer proposed by Makihata is relative to the beginning of when text started being played to the user. This is clearly not a determination of prosody. Prosody, as commonly understood and as should be understood within the context of the present invention deals with the timing between multiple numeric key presses, and comparing the timing between these multiple presses. This timing, along with the context, determines how the numbers are formatted as text. All Makihata teaches is that you can have a timer synchronized to a prompt. The present invention as claimed has nothing to do with a prompt or the synchronization of the key presses as discussed in Makihata.

Regarding the 35 U.S.C. § 103(a) rejection of claims 8-11 and 19-24 as being unpatentable over Chaves in view of Van Tichelen and Makihata, once again, the cited passages by the Examiner fails to remotely suggest, mention or contemplate analysis of prosody of the DTMF signals. In other words, Chaves suffers from the same deficiencies as Van Tichelen. In particular, Chaves fails to teach or suggest any sort of prosodic analysis of DTMF signals, a grouping of those signals based upon the prosodic analysis, or a conversion to one of a plurality of different text representations of the DTMF signals based upon the grouping. The cited passages in columns 2, 3, and 4 of Chaves has nothing to do with prosody. Once again, what is utterly lacking from the cited passages is any teaching or suggestion that Chaves performs any sort of prosodic analysis of DTMF signals or converts DTMF signals to text based upon such an analysis.

Furthermore, each of the cited references individually or in any combination fail to suggest, mention or contemplate the determination of prosody of DTMF signals and the subsequent generation of one of a group of textual representations based on the determination of prosody.

In light of the foregoing, withdrawal of the alternative 35 U.S.C. § 103(a) rejections with respect to claims 8-11, 19-24, and 31-34 is respectfully requested. As neither Chaves, Van Tichelen, Makihata nor any combination thereof teaches or suggests the features of the present invention as claimed, withdrawal of the 35 U.S.C. § 103(a) rejection regarding claims 8-11, 19-30, and 31-34 is once again respectfully requested.

The Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. The Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Response, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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